

WHAT IS CLAIMED IS:

1. A metal plating method comprising:
preparing an acidic pretreatment agent by reacting or mixing in advance a palladium compound with a silane-coupling agent obtained by reacting an imidazole-based compound and an epoxysilane-based compound;
treating the surface of an object to be plated with said pretreatment agent; and
then electroless plating said plating object.
2. The metal plating method according to claim 1, wherein said object is a semiconductor wafer.
3. The metal plating method according to claim 1, wherein said electroless plating is a copper or nickel electroless plating.
4. The metal plating method according to claim 3, wherein a conductive layer is formed by said copper or nickel electroless plating, and a copper is electroplated on said conductive layer.
5. A metal plating pretreatment agent comprising a solution obtained by reacting or mixing in advance a palladium compound with a silane-coupling agent obtained by reacting an imidazole-based compound and an epoxysilane-based compound.
6. A semiconductor wafer, whereon a metal plating layer been formed with the metal plating method according to claim 1.
7. A semiconductor device using the semiconductor wafer according to claim 6.